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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 Claim 1 (original): A communications method for use in a
2 communications system including a base station and a
3 plurality of wireless terminals, a different communications
4 channel existing between each wireless terminal in said
5 plurality of wireless terminals and said base station, the
6 communications channel existing between each particular
7 wireless terminal and the base station having a quality
8 which is the channel quality for the particular wireless
9 terminal, the method comprising: 11/05/2007 PCHOMP 00000028 501049 10782186
10 operating the base station to: 02 FC:1201 2940.00 DA
03 FC:1202 1000.00 DA
11 i) maintain a set of channel condition
12 information indicating the channel quality of
13 each of said plurality of wireless terminals;
14 ii) examine the set of channel condition
15 information to identify wireless terminals having
16 channel conditions which differ from one another
17 by at least a pre-selected minimum amount; and
18 iii) assign a communications channel segment to
19 be used to communicate superimposed signals
20 corresponding to at least two different wireless
21 terminals identified as having channel conditions
22 which differ by at least said pre-selected
23 minimum amount.

1 Claim 2 (currently amended): ~~The communications method of~~
2 ~~claim 1,~~
3 A communications method for use in a communications system
4 including a base station and a plurality of wireless
5 terminals, a different communications channel existing
6 between each wireless terminal in said plurality of

7 wireless terminals and said base station, the
8 communications channel existing between each particular
9 wireless terminal and the base station having a quality
10 which is the channel quality for the particular wireless
11 terminal, the method comprising:
12 operating the base station to:
13 i) maintain a set of channel condition
14 information indicating the channel quality of
15 each of said plurality of wireless terminals;
16 ii) examine the set of channel condition
17 information to identify wireless terminals having
18 channel conditions which differ from one another
19 by at least a pre-selected minimum amount; and
20 iii) assign a communications channel segment to be used to
21 communicate superimposed signals corresponding to at least
22 two different wireless terminals identified as having
23 channel conditions which differ by at least said pre-
24 selected minimum amount;
25 wherein the maintained set of channel condition
26 information includes channel signal to noise ratio
27 information;
28 wherein said at least two different wireless terminals
29 include a first and a second wireless terminal; and
30 wherein the minimum pre-selected amount by which the
31 channel conditions of the first and second wireless
32 terminals differ is 3 dB.

1 Claim 3 (original): The method of claim 1, further
2 comprising:
3 operating the base station to repeat said steps of
4 maintaining, examining and assigning.

1 Claim 4 (original): The method of claim 1, further
2 comprising:

3 operating the base station to repeat said steps of
4 maintaining and examining; and wherein when said
5 examining step fails to identify at least two wireless
6 terminals having channel conditions which differ by the
7 pre-selected minimum amount having signals to be
8 transmitted in a communications channel segment which is
9 available to be assigned, operating said base station to:
10 assign the available communications channel
11 segment to a single one of said plurality of wireless
12 terminals.

1 Claim 5 (currently amended): ~~The communications method of~~
2 ~~claim 1,~~

3 A communications method for use in a communications system
4 including a base station and a plurality of wireless
5 terminals, a different communications channel existing
6 between each wireless terminal in said plurality of
7 wireless terminals and said base station, the
8 communications channel existing between each particular
9 wireless terminal and the base station having a quality
10 which is the channel quality for the particular wireless
11 terminal, the method comprising:

12 operating the base station to:

- 13 i) maintain a set of channel condition
14 information indicating the channel quality of
15 each of said plurality of wireless terminals;
16 ii) examine the set of channel condition
17 information to identify wireless terminals having
18 channel conditions which differ from one another
19 by at least a pre-selected minimum amount; and
20 iii) assign a communications channel segment
21 to be used to communicate superimposed signals
22 corresponding to at least two different wireless
23 terminals identified as having channel conditions

24 which differ by at least said pre-selected
25 minimum amount; and
26 ~~wherein said at least two different wireless terminals~~
27 ~~includes a first wireless terminal and a second wireless~~
28 ~~terminal;~~
29 ~~wherein said assigned communications channel segment~~
30 ~~is a segment of a downlink channel;~~
31 ~~wherein the first wireless terminal has a better~~
32 ~~channel quality than said second wireless terminal, the~~
33 ~~method further comprising:~~
34 operating the base station to transmit a first
35 superimposed signal to the first and second wireless
36 terminals in said assigned communication channel
37 segment, said first superimposed signal including a
38 low power signal portion intended for said first
39 wireless terminal and a high power signal portion
40 intended for said second wireless terminal, the low
41 power signal portion being transmitted by said base
42 station with lower power than said high power signal
43 portion or having less coding protection than said
44 high power signal portion;
45 wherein said at least two different wireless
46 terminals includes a first wireless terminal and a second
47 wireless terminal;
48 wherein said assigned communications channel
49 segment is a segment of a downlink channel; and
50 wherein the first wireless terminal has a better
51 channel quality than said second wireless terminal.

1 Claim 6 (original): The communications method of claim 5,
2 wherein said assigned communications channel segment is a
3 segment of an assignment channel used to communicate
4 communications channel segment assignments to wireless
5 terminals.

1 Claim 7 (original): The communications method of claim 6,
2 further comprising:
3 operating said base station to:
4 receive a second superimposed signal from said
5 first and second wireless terminals, said received
6 second superimposed signal including first and second
7 signal portions transmitted by said first and second
8 wireless terminals, respectively, said first signal
9 portion being received by said base station at a
10 higher power level than said second signal portion.

1 Claim 8 (original): The communications method of claim 7,
2 further comprising:
3 operating said base station to:
4 decode said first signal portion;
5 subtract said first signal portion from said
6 second superimposed signal; and
7 decode said second signal portion.

1 Claim 9 (original): The communications method of claim 7,
2 further comprising:
3 operating the first wireless terminal to determine
4 which one of a plurality of received target power levels to
5 use in determining the transmission power to use to
6 transmit said first signal portion from said first
7 superimposed signal transmitted to said first and second
8 wireless terminals in said segment of an assignment
9 channel.

1 Claim 10 (original): The communications method of claim 9,
2 wherein operating the first wireless terminal to determine
3 which one of a plurality of received target power levels to
4 use includes:

5 determining whether the portion of the first
6 superimposed signal used to communicate uplink channel
7 assignment information to the first wireless terminal was
8 transmitted as a low power signal portion or a high power
9 signal portion.

1 Claim 11 (original): A base station for use in a
2 communications system including a plurality of wireless
3 terminals, a different communications channel existing
4 between each wireless terminal in said plurality of
5 wireless terminals and said base station, the
6 communications channel existing between each particular
7 wireless terminal and the base station having a quality
8 which is the channel quality for the particular wireless
9 terminal, the base station comprising:
10 a set of channel condition information indicating the
11 channel quality of each of said plurality of wireless
12 terminals;
13 means for examining the set of channel condition
14 information to identify wireless terminals having channel
15 conditions which differ from one another by a pre-selected
16 minimum amount; and
17 means for assigning a communications channel segment
18 to be used to communicate superimposed signals
19 corresponding to a least two different wireless terminals
20 identified as having channel conditions which differ by at
21 least said pre-selected minimum amount.

1 Claim 12 (currently amended): ~~The base station of claim~~
2 ~~11,~~ A base station for use in a communications system
3 including a plurality of wireless terminals, a different
4 communications channel existing between each wireless
5 terminal in said plurality of wireless terminals and said
6 base station, the communications channel existing between

7 each particular wireless terminal and the base station
8 having a quality which is the channel quality for the
9 particular wireless terminal, the base station comprising:
10 a set of channel condition information indicating the
11 channel quality of each of said plurality of wireless
12 terminals;
13 means for examining the set of channel condition
14 information to identify wireless terminals having channel
15 conditions which differ from one another by a pre-selected
16 minimum amount; and
17 means for assigning a communications channel segment
18 to be used to communicate superimposed signals
19 corresponding to a least two different wireless terminals
20 identified as having channel conditions which differ by at
21 least said pre-selected minimum amount;
22 wherein said at least two different wireless terminals
23 includes a first and a second wireless terminal;
24 wherein the maintained set of channel condition
25 information includes channel signal to noise ratio
26 information; and
27 wherein the minimum pre-selected amount by which the
28 channel conditions of a first and second wireless terminals
29 differ is 3 dB.

1 Claim 13 (original): The base station of claim 11, further
2 comprising:
3 means for assigning an available communications
4 channel segment to a single one of said plurality of
5 wireless terminals when said examining means fails to
6 identify at least two wireless terminals having channel
7 conditions which differ by the pre-selected minimum amount
8 which have signals to be transmitted in the communications
9 channel segment which is available to be assigned.

1 Claim 14 (currently amended): ~~The communications method of~~
2 ~~claim 13, further comprising:~~ A base station for use in a
3 communications system including a plurality of wireless
4 terminals, a different communications channel existing
5 between each wireless terminal in said plurality of
6 wireless terminals and said base station, the
7 communications channel existing between each particular
8 wireless terminal and the base station having a quality
9 which is the channel quality for the particular wireless
10 terminal, the base station comprising:
11 a set of channel condition information indicating the
12 channel quality of each of said plurality of wireless
13 terminals;
14 means for examining the set of channel condition
15 information to identify wireless terminals having channel
16 conditions which differ from one another by a pre-selected
17 minimum amount; and
18 means for assigning a communications channel segment
19 to be used to communicate superimposed signals
20 corresponding to a least two different wireless terminals
21 identified as having channel conditions which differ by at
22 least said pre-selected minimum amount;
23 means for assigning an available communications
24 channel segment to a single one of said plurality of
25 wireless terminals when said examining means fails to
26 identify at least two wireless terminals having channel
27 conditions which differ by the pre-selected minimum amount
28 which have signals to be transmitted in the communications
29 channel segment which is available to be assigned; and
30 a receiver for receiving a superimposed signal from
31 said first and second wireless terminals, said received
32 superimposed signal including first and second signal
33 portions transmitted by said first and second wireless
34 terminals, respectively, said first signal portion being

35 received by said base station at a higher power level than
36 said second signal portion, said first wireless terminal
37 having a better channel condition than said second wireless
38 terminal.

1 Claim 15 (original): The base station of claim 14, further
2 comprising:

3 a superposition decoder for decoding said first and
4 second signal portions of the received superimposed signal.

1 Claim 16 (original): The base station of claim 15, wherein
2 said superposition decoder includes:

3 a decoder device for decoding said first signal
4 portion;

5 a subtracter for subtracting said first signal portion
6 from said superimposed signal to produce said second signal
7 portion; and

8 a second decoder device for decoding said second
9 signal portion.

1 Claim 17 (original): A communications method for use in a
2 communications system including a base station and a
3 plurality of wireless terminals, a different communications
4 channel existing between each wireless terminal in said
5 plurality of wireless terminals and said base station, the
6 communications channel existing between each particular
7 wireless terminal and the base station having a quality
8 which is the channel quality for the particular wireless
9 terminal, the method comprising:

10 operating a first wireless terminal having a first
11 channel quality to transmit a first portion of a
12 superimposed communications signal to said base station;
13 and

14 operating a second wireless terminal having a second
15 channel quality to transmit a second portion of said
16 superimposed communications signal to said base station,
17 the first and second channel qualities being different by
18 at least a first pre-selected amount, said first and second
19 signal portions combining in the air during transmission to
20 the base station to form said superimposed communications
21 signal.

1 Claim 18 (previously presented): The communications method
2 of claim 17,
3 wherein the at least a first minimum pre-selected
4 amount by which the channel quality of the first and second
5 wireless terminals differ is 3 dB.

1 Claim 19 (previously presented): The communications method
2 of claim 17, further comprising:
3 operating the first and second wireless terminals to
4 receive, prior to transmission of said first and second
5 superimposed signal portions, a superimposed assignment
6 signal including a low power signal portion intended for
7 said first wireless terminal and a high power signal
8 portion intended for said second wireless terminal, the
9 lower power signal portion being transmitted by said base
10 station with lower power than said high power signal
11 portion, said first wireless terminal having a better
12 channel quality than said second wireless terminal, said
13 superimposed assignment signal assigning an uplink
14 communications channel segment.

1 Claim 20 (original): The communications method of claim
2 19, wherein the first and the second signal portions
3 transmitted by said first and second wireless terminals,
4 respectively, are transmitted with power levels that cause

5 said first signal portion to be received by said base
6 station at a higher power level than said second signal
7 portion.

1 Claim 21 (original): The communications method of claim
2 20, further comprising:
3 operating the first wireless terminal to determine
4 which one of a plurality of received target power levels to
5 use in determining the transmission power to use to
6 transmit said first signal portion from said superimposed
7 assignment signal.

1 Claim 22 (original): The communications method of claim
2 21, wherein operating the first wireless terminal to
3 determine which one of a plurality of received target power
4 levels to use includes:
5 determining whether the superimposed signal portion
6 used to communicate uplink channel assignment information
7 to the first wireless terminal was transmitted as a low
8 power signal portion or a high power signal portion.

1 Claim 23 (currently amended): A wireless terminal
2 including:
3 a receiver means for receiving a superimposed
4 assignment signal including a first signal portion and a
5 second signal portion one of said signal portions being
6 intended for said wireless terminal ~~terminals~~ with the
7 other one of said signal portions being intended for
8 another wireless terminal, the first signal portion being
9 received with at a lower power level than said second
10 signal portion;
11 a superposition decoder means for decoding said first
12 and second signal portions;

13 means for determining from information included in one
14 of said first and second signal portions which portion is
15 intended for said wireless terminal; and
16 a transmitter for transmitting signals in uplink
17 communications channel segments to which received
18 superimposed assignment signals intended for said wireless
19 terminal correspond.

1 Claim 24 (original): The wireless terminal of claim 23,
2 further comprising:
3 stored received target level power information for a
4 plurality of different received power target levels; and
5 means for determining which one of the plurality of
6 received target power levels to use when transmitting a
7 signal in a particular uplink communications channel
8 segment from a received superimposed assignment signal
9 corresponding to the particular uplink communications
10 channel segment.

1 Claim 25 (original): The wireless terminal of claim 24,
2 wherein said means for determining ~~includes~~ determines
3 whether the superimposed signal portion used to communicate
4 uplink channel assignment information to the wireless
5 terminal was transmitted as a low power signal portion or a
6 high power signal portion.

1 Claim 26 (previously presented): A communications method
2 for use in a communications system including a base station
3 and a plurality of wireless terminals, a different
4 communications channel existing between each wireless
5 terminal in said plurality of wireless terminals and said
6 base station, the communications channel existing between
7 each particular wireless terminal and the base station
8 having a quality which is the communications channel

9 quality for the particular wireless terminal, signals
10 transmitted from the wireless terminals to the base station
11 combining in the communications channel, the method
12 comprising:
13 operating the base station to:
14 assign an uplink communications channel segment
15 to be used simultaneously by a first and second
16 device;
17 receive a composite signal from said uplink
18 communications channel segment, said composite signal
19 including a first signal transmitted by said first
20 device and a second signal transmitted by said second
21 device; and
22 perform a superposition decoding operation on the
23 received composite signal to decode the first and
24 second signals included in said composite signal.

1 Claim 27 (original): The communications method of claim
2 26, wherein operating the base station to assign an uplink
3 communications channel segment includes operating the base
4 station to:
5 select based on communications channel quality
6 information, a first wireless terminal and a second
7 wireless terminal, the first and second wireless terminals
8 having different wireless terminal communications channel
9 qualities, to share an uplink traffic segment; and
10 wherein the method further comprises operating the
11 base station to:
12 transmit to the selected first and second
13 wireless terminals information indicating the assigned
14 traffic channel segment and which one of the first and
15 second wireless terminals should transmit signals to
16 be received by said base station at a higher power
17 level.

1 Claim 28 (original): The method of claim 27, wherein the
2 one of the first and second wireless terminals having the
3 better channel conditions is to be received at the base
4 station at the higher power level, the method further
5 comprising:
6 operating the first wireless terminal to transmit to
7 the base station in the assigned traffic channel segment a
8 first signal portion; and
9 operating the second wireless terminal to transmit to
10 the base station in the assigned traffic channel segment a
11 second signal portion, the first and second signal portions
12 superimposing during transmission to said base station.

1 Claim 29 (original): The method of claim 28, wherein the
2 first wireless terminal transmits the first signal portion
3 using less power than the power used by said second
4 wireless terminal to transmit said second signal portion
5 but the first signal portion is received by said base
6 station with a power level that is higher than the power
7 level of the second signal portion received by said base
8 station.

1 Claim 30 (original): The method of claim 29,
2 wherein said at least two different wireless terminals
3 includes a first wireless terminal and a second wireless
4 terminal;
5 wherein said communications channel segment to be
6 assigned is a segment of a downlink channel;
7 wherein the first wireless terminal has a better
8 channel quality than said second wireless terminal; and
9 wherein the base station further comprises:
10 means for transmitting a superimposed signal to the first
11 and second wireless terminals in said assigned
12 communication channel segment, said superimposed signal

13 including a low power signal portion intended for said
14 first wireless terminal and a high power signal portion
15 intended for said second wireless terminal, the lower power
16 signal portion being transmitted by said base station with
17 lower power than said high power signal portion.

1 Claim 31 (new): A computer readable medium embodying
2 machine executable instructions for controlling a base
3 station to implement a communications method in a
4 communications system including the base station and a
5 plurality of wireless terminals, a different communications
6 channel existing between each wireless terminal in said
7 plurality of wireless terminals and said base station, the
8 communications channel existing between each particular
9 wireless terminal and the base station having a quality
10 which is the channel quality for the particular wireless
11 terminal, the communications method comprising:
12 i) maintaining a set of channel condition
13 information indicating the channel quality of
14 each of said plurality of wireless terminals;
15 ii) examining the set of channel condition
16 information to identify wireless terminals having
17 channel conditions which differ from one another
18 by at least a pre-selected minimum amount; and
19 iii) assigning a communications channel segment
20 to be used to communicate superimposed signals
21 corresponding to at least two different wireless
22 terminals identified as having channel conditions
23 which differ by at least said pre-selected
24 minimum amount.

1 Claim 32 (new): A computer readable medium embodying
2 machine executable instructions for controlling a base
3 station to implement a communications method in a

4 communications system including the base station and a
5 plurality of wireless terminals, a different communications
6 channel existing between each wireless terminal in said
7 plurality of wireless terminals and said base station, the
8 communications channel existing between each particular
9 wireless terminal and the base station having a quality
10 which is the channel quality for the particular wireless
11 terminal, the communications method comprising:

12 i) maintaining a set of channel condition
13 information indicating the channel quality of
14 each of said plurality of wireless terminals;
15 ii) examining the set of channel condition
16 information to identify wireless terminals having
17 channel conditions which differ from one another
18 by at least a pre-selected minimum amount; and
19 iii) assigning a communications channel
20 segment to be used to communicate superimposed
21 signals corresponding to at least two different
22 wireless terminals identified as having channel
23 conditions which differ by at least said pre-
24 selected minimum amount;

25 wherein the maintained set of channel condition
26 information includes channel signal to noise ratio
27 information;

28 wherein said at least two different wireless terminals
29 include a first and a second wireless terminal; and

30 wherein the minimum pre-selected amount by which the
31 channel conditions of the first and second wireless
32 terminals differ is 3 dB.

1 Claim 33 (new): The computer readable medium of claim 32,
2 wherein the communications method further comprises:
3 repeating said steps of maintaining, examining and
4 assigning.

1 Claim 34 (new): A device comprising a processor configured
2 to control a base station to implement a communications
3 method in a communications system including the base
4 station and a plurality of wireless terminals, a different
5 communications channel existing between each wireless
6 terminal in said plurality of wireless terminals and said
7 base station, the communications channel existing between
8 each particular wireless terminal and the base station
9 having a quality which is the channel quality for the
10 particular wireless terminal, the communications method
11 comprising:

- 12 i) maintaining a set of channel condition
13 information indicating the channel quality of
14 each of said plurality of wireless terminals;
15 ii) examining the set of channel condition
16 information to identify wireless terminals having
17 channel conditions which differ from one another
18 by at least a pre-selected minimum amount; and
19 iii) assigning a communications channel
20 segment to be used to communicate superimposed
21 signals corresponding to at least two different
22 wireless terminals identified as having channel
23 conditions which differ by at least said pre-
24 selected minimum amount.

1 Claim 35 (new): A device comprising a processor configured
2 to control a base station to implement a communications
3 method in a communications system including the base
4 station and a plurality of wireless terminals, a different
5 communications channel existing between each wireless
6 terminal in said plurality of wireless terminals and said
7 base station, the communications channel existing between
8 each particular wireless terminal and the base station
9 having a quality which is the channel quality for the

10 particular wireless terminal, the communications method
11 comprising:
12 i) maintaining a set of channel condition
13 information indicating the channel quality of
14 each of said plurality of wireless terminals;
15 ii) examining the set of channel condition
16 information to identify wireless terminals having
17 channel conditions which differ from one another
18 by at least a pre-selected minimum amount; and
19 iii) assigning a communications channel
20 segment to be used to communicate superimposed
21 signals corresponding to at least two different
22 wireless terminals identified as having channel
23 conditions which differ by at least said pre-
24 selected minimum amount;
25 wherein the maintained set of channel condition
26 information includes channel signal to noise ratio
27 information;
28 wherein said at least two different wireless terminals
29 include a first and a second wireless terminal; and
30 wherein the minimum pre-selected amount by which the
31 channel conditions of the first and second wireless
32 terminals differ is 3 dB.

1 Claim 36 (new): The computer readable medium of claim 35,
2 wherein the communications method further comprises:
3 repeating said steps of maintaining, examining and
4 assigning.

1 Claim 37 (new): A base station for use in a communications
2 system including a plurality of wireless terminals, a
3 different communications channel existing between each
4 wireless terminal in said plurality of wireless terminals
5 and said base station, the communications channel existing

6 between each particular wireless terminal and the base
7 station having a quality which is the channel quality for
8 the particular wireless terminal, the base station
9 comprising:
10 memory including a set of channel condition
11 information indicating the channel quality of each of said
12 plurality of wireless terminals;
13 a channel condition information examination module for
14 examining the set of channel condition information to
15 identify wireless terminals having channel conditions which
16 differ from one another by a pre-selected minimum amount;
17 and
18 an assignment module for assigning a communications
19 channel segment to be used to communicate superimposed
20 signals corresponding to a least two different wireless
21 terminals identified as having channel conditions which
22 differ by at least said pre-selected minimum amount.

1 Claim 38 (new): A base station for use in a communications
2 system including a plurality of wireless terminals, a
3 different communications channel existing between each
4 wireless terminal in said plurality of wireless terminals
5 and said base station, the communications channel existing
6 between each particular wireless terminal and the base
7 station having a quality which is the channel quality for
8 the particular wireless terminal, the base station
9 comprising:
10 memory including a set of channel condition
11 information indicating the channel quality of each of said
12 plurality of wireless terminals;
13 a channel condition information examination module for
14 examining the set of channel condition information to
15 identify wireless terminals having channel conditions which

16 differ from one another by a pre-selected minimum amount;
17 and
18 an assignment module for assigning a communications
19 channel segment to be used to communicate superimposed
20 signals corresponding to a least two different wireless
21 terminals identified as having channel conditions which
22 differ by at least said pre-selected minimum amount;
23 wherein said at least two different wireless terminals
24 includes a first and a second wireless terminal;
25 wherein the maintained set of channel condition
26 information includes channel signal to noise ratio
27 information; and
28 wherein the minimum pre-selected amount by which the
29 channel conditions of a first and second wireless terminals
30 differ is 3 dB.

1 39. The base station of claim 38, further comprising:
2 a receiver for receiving a superimposed signal from
3 said first and second wireless terminals, said received
4 superimposed signal including first and second signal
5 portions transmitted by said first and second wireless
6 terminals, respectively, said first signal portion being
7 received by said base station at a higher power level than
8 said second signal portion, said first wireless terminal
9 having a better channel condition than said second wireless
10 terminal.

1 Claim 40 (new): A wireless terminal including:
2 a receiver for receiving a superimposed assignment
3 signal including a first signal portion and a second signal
4 portion one of said signal portions being intended for said
5 wireless terminal with the other one of said signal
6 portions being intended for another wireless terminal, the

7 first signal portion being received with at a lower power
8 level than said second signal portion;
9 a superposition decoder for decoding said first and
10 second signal portions;
11 a determination module for determining from
12 information included in one of said first and second signal
13 portions which portion is intended for said wireless
14 terminal; and
15 a transmitter for transmitting signals in uplink
16 communications channel segments to which received
17 superimposed assignment signals intended for said wireless
18 terminal correspond.

1 Claim 41 (new): The wireless terminal of claim 40, further
2 comprising:
3 stored received target level power information for a
4 plurality of different received power target levels; and
5 a target power level determination module for
6 determining which one of the plurality of received target
7 power levels to use when transmitting a signal in a
8 particular uplink communications channel segment from a
9 received superimposed assignment signal corresponding to
10 the particular uplink communications channel segment. Claim

1 42 (new): A method of operating a wireless terminal
2 comprising:
3 receiving a superimposed assignment signal including a
4 first signal portion and a second signal portion one of
5 said signal portions being intended for said wireless
6 terminal with the other one of said signal portions being
7 intended for another wireless terminal, the first signal
8 portion being received with at a lower power level than
9 said second signal portion;
10 decoding said first and second signal portions;

11 determining from information included in one of said
12 first and second signal portions which portion is intended
13 for said wireless terminal; and
14 transmitting signals in uplink communications channel
15 segments to which received superimposed assignment signals
16 intended for said wireless terminal correspond.

1 Claim 43 (new): The method of claim 42, further
2 comprising:
3 storing received target level power information for a
4 plurality of different received power target levels; and
5 determining which one of the plurality of received
6 target power levels to use when transmitting a signal in a
7 particular uplink communications channel segment from a
8 received superimposed assignment signal corresponding to
9 the particular uplink communications channel segment.

1 Claim 44 (new): The method of claim 43, wherein said
2 determining includes determining whether the superimposed
3 signal portion used to communicate uplink channel
4 assignment information to the wireless terminal was
5 transmitted as a low power signal portion or a high power
6 signal portion.

1 45 (new): A machine readable medium embodying machine
2 executable instructions for controlling a wireless terminal
3 to implement a method, the method comprising:
4 receiving a superimposed assignment signal including a
5 first signal portion and a second signal portion one of
6 said signal portions being intended for said wireless
7 terminal with the other one of said signal portions being
8 intended for another wireless terminal, the first signal
9 portion being received with at a lower power level than
10 said second signal portion;

11 decoding said first and second signal portions;
12 determining from information included in one of said
13 first and second signal portions which portion is intended
14 for said wireless terminal; and
15 transmitting signals in uplink communications channel
16 segments to which received superimposed assignment signals
17 intended for said wireless terminal correspond.

1 Claim 46 (new): The machine readable medium of claim 45,
2 wherein the method, further comprises:
3 storing received target level power information for a
4 plurality of different received power target levels; and
5 determining which one of the plurality of received
6 target power levels to use when transmitting a signal in a
7 particular uplink communications channel segment from a
8 received superimposed assignment signal corresponding to
9 the particular uplink communications channel segment.

1 Claim 47 (new): The machine readable medium of claim 46
2 wherein said determining includes determining whether the
3 superimposed signal portion used to communicate uplink
4 channel assignment information to the wireless terminal was
5 transmitted as a low power signal portion or a high power
6 signal portion.

1 48 (new): A device including a processor configured to
2 control a wireless terminal to implement a method, the
3 method comprising:
4 receiving a superimposed assignment signal including a
5 first signal portion and a second signal portion one of
6 said signal portions being intended for said wireless
7 terminal with the other one of said signal portions being
8 intended for another wireless terminal, the first signal

9 portion being received with at a lower power level than
10 said second signal portion;
11 decoding said first and second signal portions;
12 determining from information included in one of said
13 first and second signal portions which portion is intended
14 for said wireless terminal; and
15 transmitting signals in uplink communications channel
16 segments to which received superimposed assignment signals
17 intended for said wireless terminal correspond.

1 Claim 49 (new): The device of claim 48, wherein the
2 method, further comprises:
3 storing received target level power information for a
4 plurality of different received power target levels; and
5 determining which one of the plurality of received
6 target power levels to use when transmitting a signal in a
7 particular uplink communications channel segment from a
8 received superimposed assignment signal corresponding to
9 the particular uplink communications channel segment.

1 Claim 50 (new): The device of claim 49 wherein said
2 determining includes determining whether the superimposed
3 signal portion used to communicate uplink channel
4 assignment information to the wireless terminal was
5 transmitted as a low power signal portion or a high power
6 signal portion.

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